

[illegible]

1. An object specific information relaying system, which comprises:

one or more beacon devices, each associated with a physical object, for sending a signal which contains information relevant to said physical object, said beacon device comprising;

- a power source;
- a transmit signal receiver for receiving a transmit signal, which initiates transmission of a response signal;
- a response signal transmitter, for transmitting said response signal;

one or more information receiving devices, which comprises;

- a transmit signal transmission unit, for sending a transmit signal which initiates transmission of a response signal;
- a response signal receiving unit for receiving said response signal with first information relevant to said physical object;
- a display device for displaying said information relevant to said physical object; and

an internet accessing unit, for sending an access signal to an internet site and downloading information relevant to said physical object as a result of an access signal having been sent.

2. The object specific information relaying system of claim 1, in which said internet accessing unit is part of said one or more beacon devices.

3. The object specific information relaying system of claim 1, in which said internet accessing unit is part of said one or more receiving devices.

4. The object specific information relaying system of Claim 1, in which said internet information is downloaded upon the receipt of said transmit signal.

5. The object specific information relaying system of Claim 1, in which said beacon device includes memory means for storing internet information prior to transmitting said internet information.

6. The object specific information relaying system of Claim 5, in which said internet information is periodically downloaded at preselected intervals, and stored in said memory means for later transmission.

7. The object specific information relaying system of Claim 1, in which said information receiving device further comprises a memory means for storing information received by transmission.

8. The object specific information relaying system of Claim 1 in which said display of information is in the form of text based information.

5 9. The object specific information relaying system of Claim 1 in which said display of information is in the form of audio information.

10 10. The object specific information relaying system of Claim 1 in which said display of information is in the form of graphical based information.

11 11. The object specific information relaying system of Claim 1 in which said display of information is in the form of a combined media presentation.

15 12. The object specific information relaying system of claim 1, in which said display of information is interactive with a use, and further exchanges of information from said information receiving device and said internet website is enabled.

13. The object specific information relaying system of Claim 1 in which said signal receiving device is handheld computing device.

14. The object specific information relaying system of Claim 1 in which said signal receiving device is personal computer.

5 15. The object specific information relaying system of Claim 1 in which said signal is transmitted as an infrared signal.

16. The object specific information relaying system of Claim 1 in which said signal is transmitted as a cell phone technology signal.

10 17. The object specific information relaying system of Claim 1 in which said signal is an optical signal.

18. The object specific information relaying system of Claim 1 in which said beacon device power source is a battery.

15 19. The object specific information relaying system of Claim 1 in which said beacon device power source is a solar cell.

20 20. The object specific information relaying system of Claim 1 in which said response signal is a code which authorizes access by said internet access unit to a website.

21. The object specific information relaying system of Claim 20 in said web site enables a transfer of funds from a user account to a vendor account.

5 22. The object specific information relaying system of Claim 21 in which said transfer of funds enables a payment complete signal to be sent to said internet access unit, which upon receipt of said payment complete signal relays said payment complete signal to said beacon device, which enables a vending transaction.

10 23. An object specific information relaying system, which comprises:
one or more beacon devices, each associated with a physical object, for sending a signal which contains information relevant to said physical object, said beacon device comprising;

- a power source;
- 15 - a transmit signal receiver for receiving a transmit signal, which initiates transmission of an information signal;
- an internet accessing control logic, for accessing an internet site and downloading internet information from said internet site;
- a memory means for storing internet information prior to transmitting said
20 internet information;

- an information transmitter, for transmitting said internet information in an information signal;

one or more information receiving device which is are handheld computing devices

5 which comprises;

- a transmit signal transmission unit, for sending a transmit signal which initiates transmission of an information signal;
- an information signal receiving unit for receiving said information signal with internet information relevant to said physical object;
- a display device for converting said information signal into a display of information relevant to said physical object;
- a memory means for storing information received by transmission.

24. An object specific information relaying system, which comprises:

15 one or more beacon devices, each associated with a physical object, for sending a signal which contains information relevant to said physical object, said beacon device comprising;

- a power source;
- a transmit signal receiver for receiving a transmit signal, which initiates transmission of a response signal;

- a response signal transmitter, for transmitting a response signal containing coded information which authorized access to a website;

one or more information receiving device which is are handheld computing devices

5 which comprises;

- a transmit signal transmission unit, for sending a transmit signal which initiates transmission of an information signal;
- a response signal receiving unit for receiving said response signal from said beacon device;
- a display device for display of information relevant to said physical object;
- a memory means for storing information received by transmission;

10 an internet access unit, for sending an access signal to an internet site and downloading information relevant to said physical object as a result of said access signal
15 having been sent;

an internet site with information relevant to said physical object, which enables a transfer of funds from a user account to a vendor account upon receipt of said coded information and user authorization; wherein

said transfer of funds enables a payment complete signal to be sent to said internet access unit, which upon receipt of said payment complete signal relays said payment complete signal to said transmission unit, which transmits said payment complete signal to said beacon device, which enables a vending transaction.

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25. A method of communicating object relevant information which comprises the steps of:

mounting one or more beacon devices on one or more physical objects, for sending a signal which contains information relevant to said physical object, said beacon device comprising;

- a power source;
- a transmit signal receiver for receiving a transmit signal, which initiates transmission of an information signal;
- an internet accessing control logic, for accessing an internet site and downloading internet information from said internet site;
- a memory means for storing internet information prior to transmitting said internet information;
- an information transmitter, for transmitting said internet information in an information signal;

using one or more information receiving devices to access information from said beacon devices, in which said information receiving devices are handheld computing devices, each of which comprise;

- a transmit signal transmission unit, for sending a transmit signal which initiates transmission of an information signal;
- an information signal receiving unit for receiving said information signal with internet information relevant to said physical object;
- a display device for converting said information signal into a display of information relevant to said physical object;
- a memory means for storing information received by transmission; wherein the method further includes the steps of;

sending a transmit signal from said transmission unit of one or more of said information receiving devices, to said transmit signal receiver of one or more of said beacon devices;

accessing an internet site and downloading internet information to said one or more beacon devices;

transmitting said internet information in an information signal to said one or more information receiving devices;

receiving said information signal in said information receiving devices;

converting said information signal into a display of information; and

of the \mathcal{H}^1 -norm of the function u is bounded by the \mathcal{H}^1 -norm of the function v and the \mathcal{H}^1 -norm of the function w .